

Notice of Allowability

Application No.

10/716,947

Examiner

Nghia M. Doan

Applicant(s)

YOUNG ET AL.

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Application filed on 11/18/03 and Applicant Amended field on 05/30/06.
2. ☒ The allowed claim(s) is/are 7-10, 12-17, 19-28, and 30-33 (renumbered as 1-24).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 20060728.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


VUTHE SIEK
PRIMARY EXAMINER

DETAILED ACTION

1. Responsive to communication application 10/716,947 filed on 11/18/2003 and Applicant Amendment filed on 05/30/2006, claims 1-17, 19-28, and 30-33 are pending.

Claims 1, 7, 12, 19-21, 23, and 30-32 have been amended.

Claims 18 and 29 have been canceled.

DETAILED ACTION

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-6 and 11, drawn to a method of routing a design in a PLD based on a placement pattern, which relates to the load of the net associated with the placement pattern, classified in class 716, subclass 10.
 - II. Claims 7-10, 12-17, 19-28, and 30-33, drawn to a method of routing a design in a PLD based on a placement pattern which relates best selecting template for unrouted nets associated with the placement pattern, classified in class 716, subclass 12.

The inventions are distinct, each from the other because of the following reasons:

3. Inventions group I, claims 1-6 and 11 and group II, claims 7-10, 12-17, 19-28, and 30-33 are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination group II has separate utility such as the best selecting template for unrouted nets associated with the placement pattern, while

subcombination group I has separate utility such as each net of the placement pattern associated with its load. See MPEP § 806.05(d).

4. Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Lois D. Cartier Reg. No. 40,941 on July 28, 2006, an election was affirmed and made to group II, claims 7-10, 12-17, 19-28, and 30-33 and group I, claims 1-6 and 11 are canceled as non-elected invention (see Examiner Amendment below).

EXAMINER'S AMENDMENT

6. The claims 7-10, 12-17, 19-28, and 30-33 are to be examined in this Office Action

7. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lois D. Cartier Reg. No. 40,941 on July 28, 2006.

The application is amended as the following:

Claims 1-6 and 11 are canceled.

Allowable Subject Matter

8. Claims 7-10, 12-17, 19-28, and 30-33 are allowed.

9. The following is an examiner's statement of reasons for allowance: the reason for allowance was cited in the office action mailed on 03/10/2006.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghia M. Doan whose telephone number is 571-272-5973. The examiner can normally be reached on 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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NMD


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PRIMARY EXAMINER